MCA and 5 Lakes Energy Presentation Breakdown and Comparison Standby Tariff Charges CE & DTE v.s. Model Tariff

Michigan Public Service Commission
Working Group on SBR Tariffs for Cogeneration
November 17, 2016 Meeting

ENERGY CHARGE	CE	DTE	Conceptual Model Standby Rate Tariff
NO OUTAGE	0	0	If no Reservation Fee and Demand Charge, recover proportion of utility's embedded costs for generation capacity
SECHEDULED 16 HRS PEAK	1,113	1,218	(or capacity market purchases) and transmission in energy charges based on CHP partial-use customer's hours of use.
SCHEDULED 8 HR PEAK/ 8 HRS OFF	1,775	1,170	Pricing should reflect utility's lower costs for scheduled usage and off-peak usage.
SCHEDULED 32 HRS PEAK	2,070	2,436	OR ●If embedded generation capacity (or capacity market purchases) and
UNSCHEDULED 8HR PEAK/ 8 HR OFF	1,775	1,170	transmission are recovered in Reservation Fee and/or Demand Charge, energy pricing should reflect utility's average fuel and purchased energy costs (or utility's spot energy market purchases in the case of capacity market purchases). •Pricing should reflect peak and off-peak
			energy prices or real time energy prices.

NO OUTAGE No Outage Monthly SBR Charges	Consumers MI	DTE MI	MidAmerican IA	Ameren MO
Customer Service Charge	200	275	20	199
Delivery Capacity/ Distribution Charge	1240	6760	0	0
Min. Charge/ Reservation Fee[1]	1440	3500	6492	1400
Demand Charges[2]	0	0	0	0
Energy Charges	0	0	0	0
Standby Facilities Charge	0	0	0	1100
TOTAL	1,440	10,535	6,512	2,699

NO OUTAGE Monthly	NIPSCO	Xcel	Minnesota Power	Otter Tail Power	Dakota Electric
SBR Charges	IN	MN	MN	MN	MN
Customer Service Charge	0	25.75	0	304.33	34
Delivery Capacity/ Distribution Charge	O	O	0	0	O
Min. Charge/ Reservation Fee[1]	0	4940 (sched)/ 5140 (unsched)	1007	428.06	6560
Demand Charges[2]	0	0	0	0	0
Energy Charges	0	0	0	0	O
Standby Facilities Charge	0	0	0	900	O
TOTAL	O	4965.75/	1007	1632.39	6,594.00

16 Hour Scheduled	Consumers	DTE	MidAmerican - IA	Ameren - MO
Service Charge	200	275	20	199
Delivery Capacity/Distri bution Charge	1240	6760	0	0
Min. Charge/Reserva tion Fee	1440	3500	6492	1400
Demand Charges	2232	10,400	535	40
Energy Charges	1113	1218	1205	2285
Standby Facilities Charge	0	0	0	1100
Total	4,785	18,653	7,717	5,024

16 Hour Scheduled	NIPSCO	Xcel MN	Minnesota Power	Otter Tail Power MN	Dakota Electric MN
Service Charge	0	25	0	304	34
Delivery Capacity/ Distribution Charge	0	0	0	0	0
Minimum Charge/ Reservation Fee	0	4940	1007	428.06	0
Demand Charges	1000	0	0	0	18,020
Energy Charges	1402	994	1692	2480	2483
Standby Facilities Charge	0	0	0	900	0
Total	2,402	5,960	2,699	4,113	20,537

8 Peak/80ff Scheduled	Consumers	DTE	MidAmerican IA	Ameren – MO
Service Charge	200	275	20	199
Delivery Capacity/ Distribution Charge	1240	6760	0	0
Min. Charge/ Reservation Fee	1440	3500	6492	1400
Demand Charges	1116	5200	268	20
Energy Charges	1775	1170	1205	2198
Standby Facilities Charge	0	0	O	1100
Total	4,331	13,405	7,717	4,917

8 Peak/8Off Scheduled	NIPSCO	Xcel MN	Minnesota Power	Otter Tail Power MN	Dakota Electric MN
Service Charge	0	25	0	304	34
Delivery Capacity/ Distributio n Charge	0	0	0	O	0
Min. Charge/ Reservation Fee	O	4,940	1,007	428	O
Demand Charges	500	0	0	0	18,020
Energy Charges	1,402	994	1,692	2,007	2,483
Standby Facilities Charge	O	O	O	900	O
Total	1,902	5,960	2,699	3,639	20,537

32- Hr Scheduled	Consumers	DTE	MidAmerican - IA	Ameren - MO
Service Charge	200	275	20	199
Delivery Capacity/ Distribution Charge	1240	6760	0	0
Min. Charge/ Reservation Fee	1440	3500	6492	1400
Demand Charges	4463	20,800	1070	60
Energy Charges	2070	2436	2411	4570
Standby Facilities Charge	0	0	0	1100
Total	7,973	30,271	8,923	7,329

32- Hr Scheduled	NIPSCO	Xcel - MN	Minnesota Power	Otter Tail Power - MN	Dakota Electric - MN
Service Charge	0	25. 75	0	304.33	34
Delivery Capacity/ Distribution Charge	0	0	0	0	0
Min. Charge/ Reservation Fee	0	4940	1007	428.06	O
Demand Charges	2000	983	0	O	18,020
Energy Charges	2804	1989	3384	4961	4966
Standby Facilities Charge	0	0	0	900	0
Total	4,804	7,937	4,391	6,593	23,020

8 PEAK/ 8 OFF UNSCHEDULED	Consumers	DTE	MidAmerican - IA	Ameren - MO
Service Charge	200	275	20	199
Delivery Capacity/ Distribution Charge	1240	6760	O	O
Min. Charge/ Reservation Fee	1440	3500	6492	1400
Demand Charges	1116	9,340	268	40
Energy Charges	1775	1170	1205	2198
Standby Facilities Charge	0	0	O	1100
Total	4,331	17,545	7,985	4,937

8 PEAK/ 8 OFF UNSCHEDULED	NIPSCO	Xcel MN	Minnesota Power	Otter Tail Power MN	Dakota Electric MN
Service Charge	0	25	0	304	34
Delivery Capacity/ Distribution Charge	O	0	0	O	O
Min. Charge/ Reservation Fee	o	5,140	0	428	0
Demand Charges	676	0	21,180	816	18,020
Energy Charges	Real-Time LMP plus 0.003658 per kWh	994	hourly increment al energy costs	1,959	2,483
Standby Facilities Charge	O	0	0	900	0
Total	676 plus real-time energy charges and surcharge	6,160	21,180 plus hourly increment al energy costs	4,407	20,537

CONCEPTUAL MODEL STANDBY RATE TARIFF

Conceptual Model Standby Rate Tariff

Monthly

Customer Charge

- •Zero, assuming this is already included in the customer's supplemental power tariff (Based on administrative costs) AND
- Charge or Credit to reflect greater or lesser
 administrative costs associated with partial use customer.

Monthly

Reserv. Fee

- Zero (instead recover in demand charge)OR
- •Fixed fee to recover utility's embedded costs for generation capacity (or capacity market purchases) and transmission based on FOR of best performing CHP systems

Scheduled

On-Peak Daily, Daily or Hourly Demand

Charge

Zero

OR

- •Low variable demand charge proportionate to hours of <u>planned</u> <u>usage</u> reflecting utility's lower costs due to planning at times that impose zero or low cost to utility.
- •Reduced (or zero) variable demand charge for <u>off-peak usage</u> to reflect utility's lower costs during off-peak hours.

<u>Unscheduled</u>

•If no Reservation Fee, variable demand charge designed to recover proportion of utility's embedded costs for generation capacity (or capacity market purchases) and transmission based on CHP partial-use customer's hours of unscheduled use.

OR

- •If a fixed Reservation Fee is also charged, variable demand charge designed to recover utility's embedded costs for generation capacity (or capacity market purchases) and transmission based on CHP partial use customer's proportionate use above FOR assumed in Reservation Fee
- •Reduced (or zero) variable demand charge for <u>off-peak usage</u> to reflect utility's lower costs during off-peak hours.

Energy Charge

- If no Reservation Fee and Demand Charge, recover proportion of utility's embedded costs for generation capacity (or capacity market purchases) and transmission in energy charges based on CHP partial-use customer's hours of use.
- •Pricing should reflect utility's lower costs for scheduled usage and off-peak usage.

OR

- •If embedded generation capacity (or capacity market purchases) and transmission are recovered in Reservation Fee and/or Demand Charge, energy pricing should reflect utility's average fuel and purchased energy costs (or utility's spot energy market purchases in the case of capacity market purchases).
- Pricing should reflect peak and off-peak energy prices or real time energy prices.

COMPARISON OF ELEMENTS OF CE & DTE v.s. MODEL TARIFF

Monthly Customer Charge	CONSUMERS	DTE	Conceptual Model Standby Rate Tariff		
NO OUTAGE	200	275	•Zero, assuming this is already included in the		
SECHEDULED - 16 HRS PEAK	200	275	customer's supplemental power		
SCHEDULED – 8 HRS PEAK; 8 HRS OFF-PEAK	200	275	tariff (Based on administrative costs)		
SCHEDULED – 32 HRS PEAK	200	275	AND		
UNSCHEDULED	200	275	•Charge or Credit to reflect greater or lesser administrative costs associated with partial use customer.		

Delivery Capacity/ Distribution Charge	CONSUMERS	DTE	Conceptual Model Standby Rate Tariff
NO OUTAGE	1,240	6,670	
SECHEDULED 16 HRS PEAK	1,240	6,760	
8 HR PEAK/ 8 HRS OFF	1,240	6,760	
SCHEDULED 32 HRS PEAK	1,240	6,760	
UNSCHEDULED 8HR PEAK/ 8 HR OFF	1,240	6,760	

Minimum Charge/ Reservation Fee	CONSUMERS	DTE	Conceptual Model Standby Rate Tariff
NO OUTAGE	1,440	3,500	•Zero (instead recover in demand charge)
SECHEDULED 16 HRS PEAK	1,440	3,500	• Fixed fee to recover utility's embedded costs for generation capacity (or capacity market purchases) and transmission based on FOR of best performing
8 HR PEAK/ 8 HRS OFF	1,440	3,500	
SCHEDULED 32 HRS PEAK	1,440	3,500	
8HR PEAK/ 8 HR OFF	1,440	3,500	CHP systems

DEMAND CHARGE	CE	DTE	Conceptual Model Standby Rate Tariff	
NO OUTAGE	0	0	Scheduled ◆Zero OR ◆Low variable demand charge proportionate to hours of	
SECHEDULED 16 HRS PEAK	2,232	10,400	planned usage reflecting utility's lower costs due to planning at times that impose zero or low cost to utility. •Reduced (or zero) variable demand charge for off-peak	
8 HR PEAK/ 8 HRS OFF	1,116	5,200 Unscheduled If no Reservation Fee, variable demand charge design		
SCHEDULED 32 HRS PEAK	4,463	20,800	recover proportion of utility's embedded costs for generation capacity (or capacity market purchases) and transmission based on CHP partial-use customer's hours of unscheduled use.	
UNSCHEDULED 8HR PEAK/ 8 HR OFF	1,116	9,340	OR ●If a fixed Reservation Fee is also charged, variable demand charge designed to recover utility's embedded costs for generation capacity (or capacity market purchases) and transmission based on CHP partial use customer's proportionate use above FOR assumed in Reservation Fee ●Reduced (or zero) variable demand charge for off-peak usage to reflect utility's lower costs during off-peak hours.	

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